

GATE ELECTRODES AND THE FORMATION THEREOF

Abstract

A method of fabricating a gate electrode for a semiconductor comprising the steps of: providing a substrate; providing on the substrate a layer of a first material of thickness t_p , the first material being selected from the group consisting of Si, $\text{Si}_{1-x}\text{Ge}_x$ alloy, Ge and mixtures thereof and a layer of metal of thickness t_m ; and annealing the layers, such that substantially all of the first material and the metal are consumed during reaction with one another.